## Amendment to the Claims

Kindly cancel claims 10, 30 and 52, and amend claims 1, 6, 11-13, 16-17, 20-21, 26, 31-33, 36-37, 40-43, 48, 53-55, 58-59 and 62, as set forth below. In compliance with the Revised Amendment Format published in the Official Gazette on February 25, 2003, a complete listing of claims is provided herein. The changes in the amended claims are shown by strikethrough or double brackets (for deleted matter) and underlining (for added matter).

1. (Currently Amended) A method of tuning sockets of a <u>clustered</u> computing environment, said method comprising:

obtaining, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened;

dynamically determining information relating to a current configuration of the clustered computing environment; and

setting one or more parameters of a socket of said <u>clustered</u> computing environment based on the dynamically determined information <u>and the obtained value</u>.

- 2. (Original) The method of claim 1, wherein said dynamically determining is performed in response to opening the socket.
- 3. (Original) The method of claim 1, wherein said one or more parameters comprise a size of a send buffer of the socket.
- 4. (Original) The method of claim 1, wherein said one or more parameters comprise a size of a receive buffer of the socket.
- 5. (Original) The method of claim 1, wherein said dynamically determining comprises determining a maximum amount of data that can be sent by said socket based on the current configuration.



- 6. (Currently Amended) The method of claim 1, wherein said information comprises information relating to a network of the <u>clustered</u> computing environment coupled to the socket.
- 7. (Original) The method of claim 6, wherein said information relating to the network comprises at least one of a network adapter maximum segment size and an adapter transmit limit.



- 8. (Original) The method of claim 1, wherein said information comprises information relating to the socket.
- 9. (Original) The method of claim 8, wherein said information comprises at least one of a current socket send buffer size, a current socket receive buffer size and a current socket maximum buffer limit.
  - 10. (Canceled)
- 11. (Currently Amended) The method of claim 1, wherein said <u>clustered</u> computing environment includes an indeterminate number of sockets.
- 12. (Currently Amended) The method of claim 1, wherein said <u>clustered</u> computing environment includes <u>a plurality of one</u> or more networks.
- 13. (Currently Amended) The method of claim 1, wherein said setting is performed by a node of the <u>clustered</u> computing environment initiating a socket connection with another node of the <u>clustered</u> computing environment, and wherein the socket is local to the initiating node.
- 14. (Original) The method of claim 13, wherein said setting comprises setting a size of a send buffer of the socket based on at least one of a desired amount of data streaming through

the send buffer, an amount of data that can be transmitted, and a maximum buffer limit of the socket.

- 15. (Original) The method of claim 13, wherein said setting comprises setting a size of a receive buffer of the socket, such that the size does not exceed a maximum buffer limit of the socket.
- 16. (Currently Amended) The method of claim 1, wherein said setting is performed by [[a]] one node of the <u>clustered</u> computing environment being connected to by another node initiating a socket connection with the <u>one</u> node, and wherein the socket is local to the <u>one</u> node.
- 17. (Currently Amended) The method of claim 16, wherein said setting comprises setting a size of a send buffer of the socket based on [[a]] the number of remote sockets to be opened.
- 18. (Original) The method of claim 16, wherein said setting comprises setting a size of a send buffer of the socket based on a maximum buffer limit of the socket.
- 19. (Original) The method of claim 16, wherein said setting comprises setting a size of a receive buffer of the socket based on an amount of data that can be received.
- 20. (Currently Amended) A method of tuning sockets of a <u>clustered</u> computing environment, said method comprising:

obtaining, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened;

determining, in response to opening a socket of the <u>clustered</u> computing environment, information relating to a current configuration of the <u>clustered</u> computing environment, said information including at least one of information relating to a network



of the <u>clustered</u> computing environment coupled to the socket and information relating to the socket; and

setting one or more parameters of the socket based on the determined information and the obtained value, wherein the one or more parameters reflect the current configuration of the <u>clustered</u> computing environment.

21. (Currently Amended) A system of tuning sockets of a <u>clustered</u> computing environment, said system comprising:

means for obtaining, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened;

means for dynamically determining information relating to a current configuration of the <u>clustered</u> computing environment; and

means for setting one or more parameters of a socket of said <u>clustered</u> computing environment based on the dynamically determined information <u>and the obtained value</u>.

- 22. (Original) The system of claim 21, wherein the dynamically determining is performed in response to opening the socket.
- 23. (Original) The system of claim 21, wherein said one or more parameters comprise a size of a send buffer of the socket.
- 24. (Original) The system of claim 21, wherein said one or more parameters comprise a size of a receive buffer of the socket.
- 25. (Original) The system of claim 21, wherein said means for dynamically determining comprises means for determining a maximum amount of data that can be sent by said socket based on the current configuration.



- 26. (Currently Amended) The system of claim 21, wherein said information comprises information relating to a network of the <u>clustered</u> computing environment coupled to the socket.
- 27. (Original) The system of claim 26, wherein said information relating to the network comprises at least one of a network adapter maximum segment size and an adapter transmit limit.
- 28. (Original) The system of claim 21, wherein said information comprises information relating to the socket.
- 29. (Original) The system of claim 28, wherein said information comprises at least one of a current socket send buffer size, a current socket receive buffer size and a current socket maximum buffer limit.
  - 30. (Canceled)
- 31. (Currently Amended) The system of claim 21, wherein said <u>clustered</u> computing environment includes an indeterminate number of sockets.
- 32. (Currently Amended) The system of claim 21, wherein said <u>clustered</u> computing environment includes <u>a plurality of</u> one or more networks.
- 33. (Currently Amended) The system of claim 21, wherein said means for setting comprises performing the setting by a node of the <u>clustered</u> computing environment initiating a socket connection with another node of the <u>clustered</u> computing environment, and wherein the socket is local to the initiating node.
- 34. (Original) The system of claim 33, wherein said means for setting comprises means for setting a size of a send buffer of the socket based on at least one of a desired amount

of data streaming through the send buffer, an amount of data that can be transmitted, and a maximum buffer limit of the socket.

- 35. (Original) The system of claim 33, wherein said means for setting comprises means for setting a size of a receive buffer of the socket, such that the size does not exceed a maximum buffer limit of the socket.
- 36. (Currently Amended) The system of claim 21, wherein said means for setting comprises performing the setting by a node of the <u>clustered</u> computing environment being connected to by another node initiating a socket connection with the node, and wherein the socket is local to the node.

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- 37. (Currently Amended) The system of claim 36, wherein said means for setting comprises means for setting a size of a send buffer of the socket based on [[a]] the number of remote sockets to be opened.
- 38. (Original) The system of claim 36, wherein said means for setting comprises means for setting a size of a send buffer of the socket based on a maximum buffer limit of the socket.
- 39. (Original) The system of claim 36, wherein said means for setting comprises means for setting a size of a receive buffer of the socket based on an amount of data that can be received.
- 40. (Currently Amended) A system of tuning sockets of a <u>clustered</u> computing environment, said system comprising:

means for obtaining, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened;

means for determining, in response to opening a socket of the <u>clustered</u> computing environment, information relating to a current configuration of the <u>clustered</u> computing environment, said information including at least one of information relating to a network of the <u>clustered</u> computing environment coupled to the socket and information relating to the socket; and

means for setting one or more parameters of the socket based on the determined information and the obtained value, wherein the one or more parameters reflect the current configuration of the <u>clustered</u> computing environment.

41. (Currently Amended) A system of tuning sockets of a <u>clustered</u> computing environment, said system comprising:

an application of the clustered computing environment to obtain a value indicating a number of remote sockets to be opened;

at least one node to dynamically determine information relating to a current configuration of the <u>clustered</u> computing environment; and

one or more nodes of the at least one node to set one or more parameters of a socket of said <u>clustered</u> computing environment based on the dynamically determined information <u>and the obtained value</u>.

42. (Currently Amended) A system of tuning sockets of a <u>clustered</u> computing environment, said system comprising:

an application of the clustered computing environment to obtain a value indicating a number of remote sockets to be opened;

at least one node to determine, in response to opening a socket of the <u>clustered</u> computing environment, information relating to a current configuration of the <u>clustered</u> computing environment, said information including at least one of information relating to a network of the <u>clustered</u> computing environment coupled to the socket and information relating to the socket; and

one or more nodes of the at least one node to set one or more parameters of the socket based on the determined information and the obtained value, wherein the one or more parameters reflect the current configuration of the <u>clustered</u> computing environment.

43. (Currently Amended) At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method of tuning sockets of a <u>clustered</u> computing environment, said method comprising:

obtaining, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened;

dynamically determining information relating to a current configuration of the <u>clustered</u> computing environment; and

setting one or more parameters of a socket of said <u>clustered</u> computing environment based on the dynamically determined information <u>and the obtained value</u>.

- 44. (Original) The at least one program storage device of claim 43, wherein said dynamically determining is performed in response to opening the socket.
- 45. (Original) The at least one program storage device of claim 43, wherein said one or more parameters comprise a size of a send buffer of the socket.

- 46. (Original) The at least one program storage device of claim 43, wherein said one or more parameters comprise a size of a receive buffer of the socket.
- 47. (Original) The at least one program storage device of claim 43, wherein said dynamically determining comprises determining a maximum amount of data that can be sent by said socket based on the current configuration.
- 48. (Currently Amended) The at least one program storage device of claim 43, wherein said information comprises information relating to a network of the <u>clustered</u> computing environment coupled to the socket.
- 49. (Original) The at least one program storage device of claim 48, wherein said information relating to the network comprises at least one of a network adapter maximum segment size and an adapter transmit limit.
- 50. (Original) The at least one program storage device of claim 43, wherein said information comprises information relating to the socket.
- 51. (Original) The at least one program storage device of claim 50, wherein said information comprises at least one of a current socket send buffer size, a current socket receive buffer size and a current socket maximum buffer limit.
  - 52. (Canceled)
- 53. (Currently Amended) The at least one program storage device of claim 43, wherein said <u>clustered</u> computing environment includes an indeterminate number of sockets.
- 54. (Currently Amended) The at least one program storage device of claim 43, wherein said <u>clustered</u> computing environment includes a <u>plurality of one or more</u> networks.

- 55. (Currently Amended) The at least one program storage device of claim 43, wherein said setting is performed by a node of the <u>clustered</u> computing environment initiating a socket connection with another node of the <u>clustered</u> computing environment, and wherein the socket is local to the initiating node.
- 56. (Original) The at least one program storage device of claim 55, wherein said setting comprises setting a size of a send buffer of the socket based on at least one of a desired amount of data streaming through the send buffer, an amount of data that can be transmitted, and a maximum buffer limit of the socket.
- 57. (Original) The at least one program storage device of claim 55, wherein said setting comprises setting a size of a receive buffer of the socket, such that the size does not exceed a maximum buffer limit of the socket.
- 58. (Currently Amended) The at least one program storage device of claim 43, wherein said setting is performed by [[a]] one node of the computing environment being connected to by another node initiating a socket connection with the node, and wherein the socket is local to the one node.
- 59. (Currently Amended) The at least one program storage device of claim 58, wherein said setting comprises setting a size of a send buffer of the socket based on [[a]] the number of remote sockets to be opened.
- 60. (Original) The at least one program storage device of claim 58, wherein said setting comprises setting a size of a send buffer of the socket based on a maximum buffer limit of the socket.
- 61. (Original) The at least one program storage device of claim 58, wherein said setting comprises setting a size of a receive buffer of the socket based on an amount of data that can be received.



62. (Currently Amended) At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method of tuning sockets of a <u>clustered</u> computing <u>environment</u> <u>environment</u>, said method comprising:

obtaining, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened;

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determining, in response to opening a socket of the <u>clustered</u> computing environment, information relating to a current configuration of the <u>clustered</u> computing environment, said information including at least one of information relating to a network of the <u>clustered</u> computing environment coupled to the socket and information relating to the socket; and

setting one or more parameters of the socket based on the determined information and the obtained value, wherein the one or more parameters reflect the current configuration of the <u>clustered</u> computing environment.